

# **Amendment Report**

## **Application for Licence Amendment**

#### Part V Division 3 of the Environmental Protection Act 1986

Licence Number	L7182/1998/11
Licence Holder	Dampier Salt Limited
ACN	008 706 590
File Number	DER2014/000643-1~3
Premises	Dampier Operations Dampier Highway Dampier, 6713.
	Legal description –
	ML 253SA
	As defined by the coordinates in Schedule 1 of the Revised Licence
Date of Report	15/12/2022
Decision	Revised licence granted

#### Alana Kidd MANAGER, RESOURCE INDUSTRIES REGULATORY SERVICES

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

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## 1. Decision summary

Licence L7182/1997/11 is held by Dampier Salt Limited (Licence Holder) for the Dampier Operations (the Premises), located at Dampier Highway, ML 253SA, Dampier, 6713.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L7182/1997/11 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <a href="https://dwer.wa.gov.au/regulatory-documents">https://dwer.wa.gov.au/regulatory-documents</a>.

## 2.2 Application summary

On 18 August 2022, the Licence Holder submitted an application to the department to amend Licence L7182/1997/11 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Increase Category 14 design capacity from 4,200,000 to 5,000,000 tonnes per annual period.
- This increase is to allow for fluctuations in annual production attributed to weather conditions.

This amendment is to allow the premises to be ready for high yield years where the annual production is greater due to ideal weather conditions. Over the last eight years the site has averaged approximate production quantities of 3.6 million tonnes of salt per annum, with a maximum of 4.1 million tonnes in 2019 and a minimum of 2.1 million tonnes in 2015.

Considering that the annual production quantity is subject to weather patterns, an increase in design capacity is a precautionary change to prevent a loss if the site experiences an annual yield that exceeded 4.2 million tonnes. Based off the historical yields, it is unlikely that the risks or emissions would significantly deviate from annual rates.

This amendment is limited only to changes to Category 14 activities from the Existing Licence. No changes to the aspects of the existing Licence relating to Category 58A have been requested by the Licence Holder. Table 1 below outlines the proposed changes to the existing Licence

Category	Current design capacity	Proposed design capacity	Description of proposed amendment			
14	4,200,000 tonnes per year	5,000,000 tonnes per year	800,000 tonne increase to capacity to allow for fluctuations in annual production attributed to weather			

#### Table 1: Proposed design capacity changes

## 2.3 Part IV of the EP Act

The Premises is currently regulated under Part IV of the EP Act through Ministerial Statement (MS) 0116. The Environmental Protection Authority provided the report and recommendation Bulletin 448 for a salt field enhancement on 19 October 1990.

Under the Ministerial Statement 0116 the following commitments relate to this Licence Amendment:

- 1. Proponent is to monitor the effects of stormwater discharge channel outlets to identify scouring or sedimentation of adjacent mudflats, and report as required.
- 8. Proponent must continue monitoring bitterns discharged, and make data available to the Environmental Protection Authority, on request. This will include:
  - a. from the operating field
    - 1. densities on a daily basis.
    - 2. volumes as monthly totals.
    - 3. Compositions, following changes in regime, to establish relationship to density
  - b. In the bitterns channel and outflow area -
    - 4. two yearly aerial photographs, including infra red exposures of the bitterns channel and adjacent mangrove areas.
    - 5. continue yearly prawn surveys comparing prawn numbers in Nickol Creek with a control; Nickol River, for three years after each expansion stage.
    - 6. bitterns mixing studies in the bitterns channel, following changes in discharge regime.
    - 7. reporting any significant effects on marine life and vegetation

In considering the potential impacts of the proposal, the CEO has determined that the existing conditions of the Licence L7182/1997/11 and MS 0116 will adequately manage the proposed changes to the Category 14 solar salt manufacturing design capacity.

## 2.4 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes made under the previously issued Amendment Notices as summarised in Table 2.

Instrument	Issued	Summary of approval
L7182/1997/11	12/09/2013	Licence reissue and conversion to new format
L7182/1997/11	07/01/2016	Notice of amendment and schedule of licences with amended expiry dates
L7182/1997/11	14/10/2018	Amendment Notice 1 to increase the premises production capacity or design capacity and to remove a discharge point that has been converted to a containment pond
L7182/1997/11	16/05/2022	Notice of amendment and schedule of licences with amended reporting conditions

Table 2: Licences consolidated in this amendment

The obligations of the Licence Holder have not changed in consolidating the licence. The department has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the format and appearance of the Licence;
- deleted the redundant AACR form set out in schedule 1 of the previous licence and advise the License Holder to obtain the form from the department's website;
- revised licence condition numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The full consolidation of licence conditions as they relate to this Revised Licence are detailed in Section 5.1. Previously issued Amendment Notices will remain on the department's website for future reference and will act as a record of the department's decision making.

## 3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk* assessments (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

## 3.1 Source-pathways and receptors

#### 3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 3 below.

Table 3 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Emission	Sources	Potential pathways	Proposed controls
Saline / hypersaline water / wastewater	Evaporation and crystallizer ponds Salt wash plant Bitterns pond Pipelines and channels	Discharge to land and infiltration to groundwater from overflows, leaks or spills	<ul> <li>No new controls are required</li> <li>Existing controls include:</li> <li>Monitoring effects of discharge flow from stormwater channel outlets and bitterns discharge on adjacent mudflats, redesigning discharge outflow if deemed necessary.</li> <li>Construction of evaporation ponds with HDPE liner to limit potential for seepage;</li> <li>Operating ponds with a minimum vertical freeboard of 200 mm to limit discharge to land</li> <li>Overflow point constructed for</li> </ul>

#### Table 3: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
			extreme weather events, featuring a 'T' piece to ensure water is drawn from the from the bottom of the pond reducing the likelihood that any hydrocarbons floating on the surface is discharged into the adjacent overflow pond
Salt Product	Wash plant, stockpiles and	Direct discharge to land	Applicant stated existing controls:
	conveyors		Significant realignment work occurred throughout 2020 and 2021 to rectify tracking issues on the CV005 conveyor to reduce salt spillage from conveyors.
			If spillage occurs during operations, it is removed using mechanical means and redissolved into the seawater evaporation process stream.
			There is no 'lift off' dust emission from salt crystals. This is due to several properties of solar salt grown from seawater:
			Large particle size of crystals
			• High moisture content of harvested salt
			• Washed salt moisture content of 3.5%
			<ul> <li>Magnesium chloride content makes salt hygroscopic</li> </ul>
			Due to these salt properties, haul trucks, conveyors and stackers are not covered.
			Existing controls include:
			<ul> <li>Maintenance and realignment of conveyors reduce salt spillage</li> </ul>
			<ul> <li>Procedures for collection of spilled product to be redissolved into the seawater evaporation process stream</li> </ul>
			<ul> <li>Innate properties of salt crystals that inhibit lift off: large particle size, high moisture content of harvested salt, Magnesium chloride content making the salt hygroscopic</li> </ul>
Noise	Heavy and light machine operation	Air/windborne pathway causing	No new controls are required, there will be no additional noise emissions beyond
	Vehicle Operation	impacts to public health and amenity	those already occurring at the premises
	Maintenance workshops		
Hydrocarbon	Maintenance	Spills or leaks to	No new controls are required
discharges	workshops	evaporation ponds or	Existing controls include:

Emission	Sources	Potential pathways	Proposed controls
to land	Mobile machinery Fuel Farm Vehicle wash down bays / evaporation ponds	soils	<ul> <li>Emission points on land discharge to ponds, with concentration limits for emission of TRH and BTEX, where monitoring occurs at a quarterly frequency</li> <li>Contaminated material transferred to onsite bioremediation facility where hydrocarbon contamination occurs.</li> </ul>
Particulate and Dust liftoff	Heavy and light machine operation Vehicle Operation Salt particulate lift- off from harvesting	Air/windborne dispersal	No new controls are required Existing controls include: Spraying with brine solution to create a hard seal on haul roads and stockpiling area to enhance dust suppression.

#### 3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 4 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

# Table 4: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residential Premises - Dampier	2 km north east of the premises
Residential Premises - Nickol	3.7 km south east of the premises
Karratha Airport	320m south of the premises northern point
Recreationists – Hamersley Channel	Water channel approximately 10 m north of premises
Environmental receptors	Distance from prescribed activity
Marine Environment	Water channel 10 m north of premises
Threatened Ecological Communities: Roebourne Plains gilgai grasslands (Priority 1) Horseflat Land System Plains (Priority 3)	<ol> <li>1 km overlaps the eastern edge of the premises, extending 3 km east.</li> <li>1.5 km overlap in the southwest of the premises, extending 45 km further west</li> </ol>



## Figure 1 Distance from premises boundary to sensitive receptors

Licence: L7182/1997/11

IR-T15 Amendment report template v3.0 (May 2021)

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 5.

The Revised Licence L7182/1997/11 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e.

- Category 14: Solar salt manufacturing: premises on which salt is produced by solar evaporation
- Category 58A: Bulk material loading or unloading: premises on which salt is loaded onto or unloaded from vessels by an open materials loading system

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015)

#### Table 5 Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating <sup>1</sup>	Licence Holder's controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
Operation	·		·					
(including time-limited-op	erations operations)							
	Saline /	Overflow from ponds, pipeline	Nickol Bay and Mermaid Strait recreationists	Monitoring effects of discharge flow from stormwater channel outlets and bitterns	C = Slight		Condition 2.2.1 refers to the approved emission points to surface water and their respective	
	Saline / hypersaline water from ponds and pipelines	rupture Discharge to land or from channels into marine environment	Marine life And local fauna	discharge on adjacent mudflats, redesigning discharge outflow if deemed necessary. Emissions monitoring and limits.	L = Rare Risk rating = Low	Y	locations. Condition 2.2.2 specifies the concentration limits for TRH and BTEX in any discharge to surface water	N/A
Evaporation and crvstallizer ponds, salt			Parties at Karratha airport 320m south east	Salt stockpiles do not generate dust. Lack of particulate lift off is attributed to several				
Evaporation and crystallizer ponds, salt wash plant, salt stockpiles and conveyors	Salt particulate lift- off from harvesting	Air/windborne dispersal	Adjacent beach marine ecosystem (When recovering Gypsum)	properties of solar salt grown from seawater, including large particle size of crystals, high moisture content of harvested salt, magnesium chloride content makes salt hygroscopic maintaining moisture content during stockpiled, salt solidifies to form a solid surface 'crust'.	C = Slight L = Rare <b>Risk rating = Low</b>	Y	N/A	N/A

Risk Event					Risk rating <sup>1</sup>	Licence Holder's controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
	Salt product spills	Direct discharge during hauling, conveyor loading and stockpiling	Terrestrial and marine ecosystems	Salt spills are removed using mechanical means and redissolved into the seawater evaporation process stream. The spills are managed via operational procedures, such as spill response procedures, stockpile management plans conveyor belt management and maintenance planning (maintenance and alignment assists to prevent spills)	C = Slight L = Unlikely <b>Risk rating = Low</b>	Y	N/A	N/A
	Pond overflows and inflows	Discharge to land and infiltration to groundwater	Terrestrial ecosystem and groundwater	Ponds are lined with HPDE. Pond location and capacity are designed to mitigate overtopping or overflow. Emissions monitoring and limits.	C = Slight L = Unlikely <b>Risk rating = Low</b>	Y	Conditions 2.3.1 and 2.3.2 cover the approved point source emissions to land, the point locations, and concentration limits for TRH and BTEX. Condition 3.3.1 refers to monitoring of emission concentrations and frequency of monitoring.	N/A
	Hypersaline water	Ingestion Seepage to soils and groundwater	Local fauna Soil seepage altering salinity	Monitoring seabird activity relating to the seawater ponds. Ponds are lined with HPDE.	N/A	Y	MS 0116 Commitment 11 refers to requirements for monitoring sea bird activity.	N/A
Heavy and light machine operation, vehicle operation, maintenance workshops, fuel farm,	Dust lift-off	Air/windborne	Local vegetation being smothered by dust Parties at Karratha airport	Spraying with brine solution creates a hard seal on the surface to enhance dust	C = Slight L = Rare	Y	N/A	The Environmental Protection (Unauthorised

Risk Event	Risk Event					Licence		Justification
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions <sup>2</sup> of licence	for additional regulatory controls
vehicle wash down bays / evaporation ponds			320m south east	suppression.	Risk rating = Low			Discharges) Regulations 1997 apply to operations
	Hydrocarbons	Direct discharge to land from spills / leaks wastewater from washdown bays feeding hydrocarbons to evaporation ponds or soils	Direct discharge to soil, seepage to groundwater, and surface water flow to adjacent marine area	Hydrocarbon management is controlled in accordance with the <i>Australian Standard AS</i> 1940: 2004 The storage and handling of flammable and combustible materials via self-bunded storage tanks (compliant with AS 1940:2004) are utilised on site for bulk storage, fuel storage tanks are located above ground, and concrete hardstands are installed where there is potential for hydrocarbon spills from heavy vehicle re- fueling, and spill response procedure and equipment is provided in relevant operational areas. Point source monitoring and point source limits. Ponds are lined with HPDE. Overflow the discharge point has a 'T' piece to ensure water is drawn from the bottom of the pond reducing the likelihood that any	C = Minor L = Possible <b>Risk rating =</b> <b>Medium</b>	Y	Conditions L 2.2.1 and 2.2.2 refer to the approved emission points to surface water, their respective locations, and specify the concentration limits for TRH and BTEX in any discharge to surface water Conditions L 2.3.1 and 2.3.2 cover the approved emission points to land, their respective locations, and specify the concentration limits for TRH and BTEX in any discharge to surface water	The Australian Standard AS 1940: 2004 The storage and handling of flammable and combustible materials apply to operations

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Risk Event	Risk Event				Risk rating <sup>1</sup>	Licence		Justification
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions <sup>2</sup> of licence	for additional regulatory controls
				hydrocarbons floating on the surface is discharged into the adjacent overflow pond				
	Noise	Air/windborne pathway causing impacts to health and amenity	Parties at Karratha airport 320m south east. The noise at the airport likely exceeds the noise generated at the premises	Noise emissions are in accordance with the <i>Environmental</i> <i>Protection (Noise)</i> <i>Regulations 1997</i> via standard operating procedures, and the Noise Management Plan, maintenance of machinery is completed per equipment maintenance plans, and procurement principles for new equipment include selection criteria that consider noise to minimise risk.	C = Slight L = Risk <b>Risk rating = Low</b>	Y	N/A	The Environmental Protection (Noise) Regulations 1997 apply during operations

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. Bold and underline text depicts additional regulatory controls imposed by department.

## 4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

#### Table 6: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal (11 October 2022)	The City of Karratha replied on 20 October 2022 acknowledging the proposed amendment and expressed no concern.	No response required.
The Department of Jobs, Tourism, Science and Innovation advised of proposal (11 October 2022)	The Department of Jobs, Tourism, Science, and Innovation replied on 10 November 2022, acknowledging the proposed amendment with no comments to offer.	No response required.
The Department of Mines, Industry and Safety advised of proposal (11 October 2022)	The Department of Mines, Industry and Safety replied on 20 October 2022 acknowledging the proposed amendment with no comments to offer.	No response required.

## 5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## 5.1 Summary of amendments

Table 7 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Condition no.	Proposed amendments	
1.1	Revised to current licensing format.	
1.2.1	Inclusion of new dust controls to mitigate dust emissions from crushing and screening operations.	
2.2.3	Inclusion of condition for an oily water separator prior to discharge to the marine environment.	
4.2.1	Included updated reporting conditions from Notice of amendment (2022).	
N/A	Amendment to increase throughput capacity from 4,200,000 tonnes per year to 5,000,000 tonnes per year	

Table 8 provides a list of licence conditions consolidated and revisions made to contemporise formatting. All changes have been incorporated into the Revised Licence as part of the amendment process.

Existing condition	Condition summary	Revised licence condition	Conversion notes
N/A	Licensee Title	Licence holder	Revised to current licensing terminology
N/A	Expiry Date: 21 September 2018	Expiry Date: 21 September 2034	In accordance with the Notice of Amendment of Licence Expiry Dates (29/04/2016)
N/A	Prescribed Premises Category table	Assessed Production / design capacity	Revised to current licensing format.
	Assess capacity		
N/A	Licensee	Licence holder	Revised to current licensing terminology
N/A	Contents	Removed Introduction	Revised to current licensing format.
N/A	Licence History table	Reference number, date, and summary of changes added as column titles	Revised to current licensing format.
N/A	Licence History table	N/A Interpretation section, Definitions and Table 1	Redundant condition. Revised to current licensing format.
1.1	Interpretation	Added list of Interpretations for the Licence and moved to before conditions	Revised to current licensing format.
1.1.2	Interpretation	Definitions separated into a new section	Revised to current licensing format
1.1.2	CEO interpretation	Department of Water and Environmental Regulation	Clerical error, moved with definitions section
1.1.2	CEO interpretation	Updated CEO correspondence details	Revised to current licensing format. Moved with definitions section
1.1.2	Licensee	Licence Holder	Revised to current licensing format and terminology.
1.2.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
1.2.2	Licensee	Licence Holder	Revised to current licensing format and terminology.
1.2.3	Licensee	Licence Holder	Revised to current licensing format and terminology.
1.3.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
1.3.2	Table 1.3.1	Table 1	Revised to current licensing format
Table 1.3.1	Table 1.3.1	Table 1	Revised to current licensing format

#### Table 8: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
1.3.2	Licensee	Licence Holder	Revised to current licensing format and terminology.
2.1.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
2.2.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
2.2.1	Table 2.2.1	Table 2	Revised to current licensing format
Table 2.2.1	Table 2.2.1	Table 2	Revised to current licensing format
Table 2.2.1	Emission point reference and location on Map of emission points	Added point W3e	Amendment notice 1 addition
2.2.2	Licensee	Licence Holder	Revised to current licensing format and terminology.
2.2.2	Surface water	The marine environment	Revised to current licensing format
2.2.2	Table 2.2.2	Table 3	Revised to current licensing format
Table 2.2.2	Table 2.2.2: Point source emission limits to surface water	Table 3: Point source emission limits to the marine environment Added point W3e	Revised to current licensing format Amendment notice 1 addition
2.2.3	-	All emission points listed in Table 2.2.2 must pass through an oily water separator prior to discharge to the marine environment.	Amendment notice 1 condition added
2.3.1	Table 2.3.1	Table 4	Revised to current licensing format
Table 2.3.1	Table 2.3.1	Table 4	Revised to current licensing format
2.3.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
2.3.2	Licensee	Licence Holder	Revised to current licensing format and terminology.
2.3.2	Table 2.3.2	Table 5	Revised to current licensing format
Table 2.3.2	Table 2.3.2	Table 5	Revised to current licensing format
3.1.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
3.1.2	Licensee	Licence Holder	Revised to current licensing format and terminology.
3.2.1	Licensee	Licence Holder	Revised to current licensing format and terminology.

Existing condition	Condition summary	Revised licence condition	Conversion notes
3.2.1	Table 3.2.1	Table 6	Revised to current licensing format
Table 3.2.1	Table 3.2.1 Monitoring of point source emissions to surface water	Table 6 Monitoring of point source emissions to the marine environment	Revised to current licensing terminology.
Table 3.2.1	Emission point: W2, W3 (a,b,c,d)	Emission point: W2, W3 (a,b,c,d), W3e	Revised to current licensing format and terminology.
3.3.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
3.3.1	Table 3.3.1	Table 7	Revised to current licensing format
4.1	3.1.1 to 3.1.4	4.1.1 to 4.1.4	Clerical errors
	Licensee	Licence Holder	Revised to current licensing format and terminology.
4.2.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
4.2.1	Table 4.2.1	Table 8	Revised to current licensing format
4.2.1	an Annual Environmental Report by the 30 April after the end of the annual	an Environmental-Report by 30 April 2022 and biennially thereafter.	Notice of amendment and schedule of licences with amended reporting conditions
	period	Licence Holder shall submit to the CEO an AACR by 30 April 2023 and annually thereafter, regardless of whether an environmental report is due or not.	
Table 4.2.1	Annual Environmental Report Condition 4.1.3	Environmental Report Annual Audit Compliance Report (AACR) <sup>2</sup> Note 2: AACR forms can be found in DWER website	Notice of amendment and schedule of licences with amended reporting conditions
4.2.2	Licensee Annual Environmental Report	Licence Holder Environmental Report	Revised to current licensing format and terminology. Notice of amendment and schedule of licences with amended reporting conditions
4.3.1	Licensee	Licence Holder	Revised to current licensing format and terminology.
4.3.1	Table 4.3.1	Table 9	Revised to current licensing format
N/A	-	Definition section added	Revised to current licensing format.
Schedule 1: Maps	Premises map The Premises is shown in the map below. The outline of the green shaded area	Figure 1: premises map The Premises is shown in the map above. The outline of the green	Revised to current licensing format and terminology.

Existing condition	Condition summary	Revised licence condition	Conversion notes
	depicts the Premises boundary.	shaded area depicts the Premises boundary.	
Schedule 1: Maps	Map of DSL Dampier Emission Points	Map removed	Notice of Amendment and schedule of licences with amended reporting conditions
Schedule 1: Maps	Map of emission points The locations of the emission points defined in Tables 2.3.1 and 2.5.1 are shown below	Figure 2: Map of emission pointsRevised to current licensing for and terminology.The locations of the emission points defined in Tables 2-7 are shown above.Revised to current licensing for and terminology.	
Schedule 1: Maps	-	Figure 3: Mistaken Island and East Mid Intercourse Island discharge points	Amendment notice 1 addition
Schedule 1: Maps	-	Figure 4: Discharge points to unlined evaporation ponds	Amendment notice 1 addition
Schedule 1: Maps	Map of containment infrastructure The locations of the containment infrastructure defined in Table 1.3.1 is shown below	Figure 5: Map of containment infrastructure The locations of the containment infrastructure defined in Table 1 is shown above	Revised to current licensing format and terminology.
Schedule 2	Annual Audit Compliance Report. Section A, B, C	Removed	Revised to current licensing format
Schedule 2	Licensee	Licence Holder	Revised to current licensing format and terminology.
Schedule 2: Reporting & notification forms	Section A, B, C	Text Removed	Notice of Amendment and schedule of licences with amended reporting conditions

## References

- 1. Dampier Salt Limited 2022, Email titled: Amendment Application Dampier Salt Limited (DSL) Dampier Operations licence L7182/1997/11. Received: 18 August 2022
- 2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
- 5. Environmental Protection Act 1986, *Environmental Protection (Noise) Regulations* 1997, Perth, Western Australia
- 6. Environmental Protection Act 1986, Environmental Protection (Unauthorised Discharges) Regulations 1997, Perth, Western Australia
- 7. Licence L7182/1997/11 Available at <u>Search Department of Water and</u> <u>Environmental Regulation (der.wa.gov.au)</u>
- 8. Standards Australia 2004, Australian Standard AS 1940: 2004 The storage and handling of flammable and combustible materials, Standards Australia, Sydney, NSW Australia

# Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
Table 3: Licence Holder controls Proposed Controls for	Significant realignment work occurred throughout 2020 and 2021 to rectify tracking issues on the CV005 conveyor to reduce salt spillage from conveyors.	The information provided is sufficient to answer the outstanding matters the Department had requested the Applicant to expand on. The detail was updated in the report.
Emission of Salt Product	If spillage occurs during operations, it is removed using mechanical means and redissolved into the seawater evaporation process stream.	
	There is no 'lift off' dust emission from salt crystals. This is due to several properties of solar salt grown from seawater:	
	Large particle size of crystals	
	High moisture content of harvested salt	
	Washed salt moisture content of 3.5%	
	Magnesium chloride content makes salt hygroscopic	
	Due to these salt properties, haul trucks, conveyors and stackers are not covered.	
	Risk Assessment: Table 5 Risk Events in Operation (including tin	ne-limited operations)
Source: Evaporation and crystallizer ponds, salt wash	Lack of particulate lift off is attributed to several properties of solar salt grown from seawater, including:	The information provided is sufficient to answer the outstanding matters the Department had requested the Applicant to expand on. The required information was updated
plant, salt stockpiles and conveyors	Large particle size of crystals	in the report.
Licence Holder's Controls for	High moisture content of harvested salt	
• Washed salt moisture content of 3.5%		
Salt particulate lift-off from harvesting	Magnesium chloride content makes salt hygroscopic maintaining moisture content during stockpiling	
	Once stockpiled, salt solidifies to form a solid surface 'crust'	

Condition	Summary of Licence Holder's comment	Department's response
Source: Evaporation and crystallizer ponds, salt wash	In the event of a salt spill, salt is removed using mechanical means and redissolved into the seawater evaporation process stream.	The information provided is sufficient to answer the outstanding matters the Department had requested the Applicant to expand on.
plant, salt stockpiles and conveyors	Salt product spills are managed via operational procedures, such as	
Licence Holder's Controls for	Spill response procedures	
Potential Emission:	Stockpile management plans	
Salt product spills	Conveyor belt management and maintenance planning (maintenance and alignment assists to prevent spills)	
Source: Heavy and light machine operation, vehicle operation, maintenance	Hydrocarbon management will be controlled in accordance with the Australian Standard AS 1940: 2004 The storage and handling of flammable and combustible materials via:	The information provided is sufficient to answer the outstanding matters the Department had requested the Applicant to expand on.
workshops, fuel farm, vehicle wash down bays / evaporation ponds	• Self bunded storage tanks (compliant with AS 1940:2004) are utilised on site for bulk storage.	
Licence Holder's Controls for	Fuel storage tanks are located above ground	
Potential Emission: Hydrocarbons	<ul> <li>Concrete hardstands are installed where there is potential for hydrocarbon spills from heavy vehicle re-fuelling.</li> </ul>	
,	<ul> <li>Spill response procedure and equipment is provided in relevant operational areas</li> </ul>	
Source: Heavy and light Noise emissions will be managed in accordance with the Environmental Protection (Noise) Regulations 1997 via:		The information provided is sufficient to answer the outstanding matters the Department had requested the Applicant to expand on.
operation, maintenance workshops, fuel farm, vehicle	Standard operating procedures, and the Noise Management Plan)	
wash down bays / evaporation ponds	Maintenance of machinery is completed per equipment maintenance plans	
Licence Holder's Controls for Potential Emission:	• Procurement principles for new equipment include selection criteria that consider noise to minimise risk.	
Noise	As noted in prior Annual Environment Reports for L7182, no complaints have been received in the last two calendar years.	

## Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)						
Application type						
Works approval						
		Relevant works approval number:		None		
		Has the works appr with?	Has the works approval been complied with?		No 🗆	
Licence		Has time limited operations under the works approval demonstrated acceptable operations?		Yes □	No 🗆 N/A 🗆	
		Environmental Com Critical Containmen Report submitted?		Yes □	No 🗆	
		Date Report receive	ed:			
Renewal		Current licence number:				
Amendment to works approval		Current works approval number:				
American da servicio de listemas	$\boxtimes$	Current licence number:	L7182/1997/11	7182/1997/11		
Amendment to licence		Relevant works approval number:		N/A	$\boxtimes$	
Registration		Current works approval number:		None		
Date application received						
Applicant and Premises details		·				
Applicant name/s (full legal name/s)		Dampier Salt Limited				
Premises name		Dampier Operations				
Premises location		ML253SA Dampier Highway, DAMPIER WA 6713				
Local Government Authority		City of Karratha				
Application documents						
HPCM file reference number:		DER2014/000643-1~3				
Key application documents (additional to application form):		L7182 Amendment Invoice L7182 Prescribed Premises Boundary and Project Tenure Map				
Scope of application/assessment						
		Licence amendment				
Summary of proposed activities or changes to existing operations.		Amending the prescribed premises production category 14 to increase design capacity from 4,200,000 to 5,000,000 tonnes per annual period. This is to allow for fluctuations in annual production attributed to weather conditions.				

Category number/s (activities that cause the premises to become prescribed premises)					
Table 1: Prescribed premises categories					
Prescribed premises category and description	Proposed production or design capacity		Proposed changes to the production or design capacity		
Category 14: Solar salt manufacturing: premises on which salt is produced by solar evaporation	4,20	0,000 tonnes per year	5,000,000 tonnes per annual period		
Category 58A: Bulk material loading or unloading: premises on which salt is loaded onto or unloaded from vessels by an open materials loading system	60,000 tonnes per day		N/A		
Legislative context and other approv	/als				
	Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a		Referral decision No: N/A Managed under Part V □ Assessed under Part IV □		
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?		Yes 🛛 No 🗆	Ministerial statement No: 0116 EPA Report No: 448		
Has the proposal been referred and/or assessed under the EPBC Act?		Yes 🗆 No 🖂	Reference No: N/A		
Has the applicant demonstrated occupancy (proof of occupier status)?		Yes ⊠ No □	Certificate of title General lease Mining lease / tenement S1/12/2034 ML 253SA Other evidence Expiry:		
Has the applicant obtained all relevant planning approvals?		Yes □ No □ N/A ⊠	Approval: N/A Expiry date: N/A Administrative amendment that only changes throughput capacity		
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?		Yes □ No ⊠	CPS No: N/A CPS 3698/3 CPS 6127/2 No clearing is proposed.		
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?		Yes □ No ⊠	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.		

Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes 🗆 No 🖂	Application reference No: N/A Licence/permit No: N/A Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes □ No ⊠	Name: N/A         Type: N/A         Has Regulatory Services (Water)         been consulted?         Yes □ No □ N/A ⊠         Regional office: Swan Avon / Mid-         West Gascoyne / Kwinana Peel /         North West / South West / Goldfields         / South Coast
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u> )? Yes   No   N/A
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous</i> <i>Goods Safety Act 2004, Environmental</i> <i>Protection (Controlled Waste) Regulations</i> <i>2004, State Agreement Act xxxx</i> )	Yes ⊠ No □	Environmental Protection (Noise) Regulations 1997 Environmental Protection (Unauthorised Discharges) Regulations 2004. Environmental Protection (Controlled Waste) Regulations 2004 Dampier Solar Salt Industry Agreement Act 1967 AML/00253 Dampier Archipelago and part of the Premises is a National Heritage Listing
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	N/A
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	N/A

Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?		Classification: Possibly contaminated – investigation required (PC–IR)
	Yes ⊠ No □	Date of classification: N26/09/2015
		There are three sites on separate lots (322 on plan 42624, 1502 on deposited plan 75876, and lot not listed)
		All have same TRIM ID: DEC10752/1, DWERVT6126